Page 6, lines 11-27, please replace the paragraph with the following rewritten paragraph:

Since the electroless copper plating liquid contains polyoxyethylene alkylether phosphoric acid, polyoxyethylene alkylether, and a mixture of polyoxyethylene alkylether phosphoric acid and polyoxyethylene alkylether, the plating rate is lower than the plating rate of the conventional plating process, allowing the thickness of the plated film to be controlled with ease. Specifically, when the plating rate is lowered, a time margin is achieved in the plating process to provide freedom for the design of the plating process and apparatus. This advantage manifests itself particularly in the formation of thin films. While the plating rate for such an application is usually 100 nm/min. or lower, the plating rate may be reduced to 50 nm/min. or lower. Inasmuch as the lower plating rate gives a good film thickness controllability, the electroless copper plating liquid is suitable for use in forming copper interconnections on semiconductor substrates.

IN THE CLAIMS

Cancel without prejudice claims 10-17.

Please add the following new claims:

18. (New) A method for forming copper interconnections within recesses in a surface of a semiconductor substrate, comprising:

providing a substrate with a copper seed layer within recesses in a surface of the semiconductor substrate;

forming an auxiliary copper seed layer for reinforcing the copper seed layer within the recesses using an electroless copper plating liquid at a plating rate of equal or less than 50nm/min; and

filling copper in the recesses by an electrolytic plating process using the reinforced copper seed layer as a current feeding layer.

19. (New) A method according to claim 18, wherein at least one of the recesses has an inlet size of less than 0.18 μm.

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20. (New) A method according to claim 18, wherein said electroless copper plating liquid contains dihydric copper ions.

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21. (New) A method according to claim 18, wherein said electroless copper plating liquid contains a complexing agent.

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22. (New) A method according to claim 18, wherein said electroless copper plating liquid contains an aldehyde acid.

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23. (New) A method according to claim 18, wherein said electroless copper plating liquid contains an organic alkali.

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24. (New) A method according to claim 21, wherein said complexing agent comprises EDTA• 4H (ethylenediaminetetraacetic acid).

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25. (New) A method according to claim 22, wherein said aldehyde acid comprises a glyoxylic acid.

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26. (New) A method according to claim 23, wherein said organic alkali comprises TMAH (tetramethylammonium hydroxide).

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27. (New) A method according to claim 18, wherein said electroless copper plating liquid contains polyoxyethylene alkylether phosphoric acid and/or polyoxyethylene alkylether at a concentration ranging from 1 to 100 mg/L.

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28. (New) A method according to claim 27, wherein said polyoxyethylene alkylether phosphoric acid and/or polyoxyethylene alkylether has a structure indicated below:

(polyoxyethylene alkylether phosphoric acid)

$\overline{[RO(C_2H_4O)_n]_m - \underset{\underset{O}{\|}}{P} - (OH)_{3-m}}$ m = 1 through 3

T, 9000

(polyoxyethylene alkylether)

$RO(C_2H_4O)_nH$.

17 8

29. (New) A method according to claim 20, wherein said copper ions have a concentration ranging from 0.01 to 10.0 g/L.

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30. (New) A method according to claim 24, wherein said EDTA• 4H has a concentration ranging from 0.5 to 100 g/L.

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31. (New) A method according to claim 25, wherein said glyoxylic acid has a concentration ranging from 1 through 50 g/L.

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20 14

32. (New) A method according to claim 26, wherein the electroless copper plating liquid has a pH adjusted to a range from 10 to 14.